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23494 7590 01/28/2008 TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			EXAMINER	
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#### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte TIMOTHY M. SCHMIDL, ANAND G. DABAK, MOHAMMED NAFIE, and ALAN GATHERER

Appeal 2007-1481 Application 09/915,091 Technology Center 2600

Decided: January 24, 2008

*Before*: JOSEPH L. DIXON, HOWARD B. BLANKENSHIP, and MARC S. HOFF, *Administrative Patent Judges*.

HOFF, Administrative Patent Judge.

# DECISION ON REQUEST FOR REHEARING INTRODUCTION

Appellants' Request for Rehearing, filed October 9, 2007<sup>1</sup>, contends that we erred in our Decision on Appeal entered August 6, 2007, in which we affirmed the rejection of claims 1-3 and 5-32.

#### **OPINION**

We maintain our previous conclusion that Appellants failed to show error in the rejection of the claims over the applied prior art. Appellants'

<sup>&</sup>lt;sup>1</sup> Certificate of Mailing dated October 8, 2007.

Brief purported to show error in the Examiner's rejection of claims as anticipated by Van De Berg (US 5,907,812 B1), claims 1 and 13 being representative claims in our review of the § 102 rejection.<sup>2</sup>

37 C.F.R. § 41.52(a)(1) requires that "the request for rehearing must state with particularity the points believed to have been misapprehended or overlooked by the Board." Despite this requirement, Appellants appear to reargue points that we considered and addressed in the earlier decision.

Appellants assert that the Board erred in stating that Van De Berg teaches "combining the interference information of said each of the frequency bands to produce a signal quality indication; and selecting the plurality of frequency bands for the desired wireless communication in response to the signal quality indication," as required by claim 1 (Req. for Reh'g 3), and that the Board erred in stating that Van De Berg teaches "said band selection controller operable for selecting a bandwidth of the at least one of the available frequency bands; and said band selection controller further operable for selecting the at least one frequency band for the desired wireless communication if the at least one frequency band is determined to be acceptable," as required by claim 13 (Req. for Reh'g 5).

### Claim 1

Claim 1 calls for "combining the interference information of said each of the frequency bands to produce a signal quality indication; and selecting the plurality of frequency bands for the desired wireless communication in response to the signal quality indication." Appellants argue that the Board

<sup>&</sup>lt;sup>2</sup> Claims 1, 3, 5, 8-10, 12-16, 18-20, 22, 24-26, 29, 30, and 32 stood rejected under § 102. Claims 2, 6, 7, 11, 17, 21, 23, 27, 28, and 31 stood rejected under § 103. No separate argument was made regarding the claims rejected under § 103.

erred in holding that Van De Berg's concatenation of carrier frequency positions meets the "combining ..." limitation (Req. for Reh'g 3-4). Appellants argue that Van De Berg's invention, whereby a contiguous plurality of carrier frequency positions is identified, does not correspond to the dictionary definition of "combine," and therefore Van De Berg does not anticipate Appellants' invention (Req. for Reh'g 3-4). Appellants further argue that nothing is "combined" when Van De Berg accepts a carrier frequency position, rejects a carrier frequency position, or concatenates a plurality of carrier frequency positions.

We are not persuaded of error in our position. As we explained in the Decision, we construe Van De Berg's process of continuing to scan carrier frequency positions for interference, after one or more interference-free channels have been noted, to meet the claim limitation of "combining the interference information," because Van De Berg must "combine" the "interference information" consisting of the detection of a contiguous plurality of interference-free bands in order to arrive at his determination that communication across a particular bandwidth may commence (Decision 7-8). (In the words of Appellants' dictionary definition, Van De Berg "bring[s] into a state of unity" the plural individual determinations that individual bands are free of interference into a single decision that communication in the concatenated positions may begin.) We construe Van De Berg's decision to establish communication once sufficient interferencefree bandwidth has been identified to meet the limitation of "produc[ing] a signal quality indication," because Van De Berg does not proceed with communication until the appropriate number of interference-free channels

have been detected. The "indication" of "signal quality" in Van De Berg consists of the use of the interference-free bandwidth. Finally, we read Van De Berg's establishment of communication, after identification of sufficient interference-free bandwidth, as meeting the limitation of "selecting the plurality of frequency bands for the desired wireless communication in response to the signal quality indication."

Therefore, Appellants have not shown any points which we misapprehended or overlooked in our Decision with respect to independent claim 1.

#### Claim 13

Claim 13 calls for "selecting a bandwidth of the at least one of the available frequency bands." Appellants argue that the selection "must be made from available frequency bands (plural)" (Req. for Reh'g 6). Therefore, Appellants argue, claim 13 does require the ability to change the bandwidth.

We disagree. Claim 13 contains no limitation requiring that the width of the selected channel be changeable. Appellants urge that a dictionary definition of the word "select" requires that there be plural options from which to select something (Reg. for Reh'g 5), but we decline to adopt this interpretation in the absence of specific language in the claim requiring the presence of varying channel widths.

Appellants further argue that Van De Berg does not teach a band selection controller that selects a bandwidth (during operation) (Req. for Reh'g 6). Claim 13 requires merely a "band selection controller operable for selecting a bandwidth." The phrase "operable for" is not a mandatory

limitation; it means only that the controller MAY be operated to perform the function claimed. Whether Van De Berg selects a bandwidth during device operation, or beforehand, is therefore immaterial.

Finally, Appellants argue that "the Board admits that Van De Berg uses only one bandwidth ... [i]f there is only one bandwidth, then there are no 'available frequency bands' (plural) as required by claim 13" (Req. for Reh'g 6). We are not persuaded by this argument, because we view *frequency bands* and *bandwidth* as distinct concepts. That Van De Berg may use only one size bandwidth does not imply anything about the number of "available frequency bands" that Van De Berg evaluates before selecting a contiguous plurality of them for wireless communication.

Therefore, Appellants have not shown any points which we misapprehended or overlooked in our Decision with respect to independent claim 13.

#### CONCLUSION

In summary, we have granted Appellants' request for rehearing to the extent that we have reconsidered our decision sustaining the rejection of claims 1-3 and 5-32, but we decline to modify the decision in any way.

# **DENIED**

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